

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of	:	Customer Number: 46320
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Simon HOLDSWORTH.	:	Confirmation Number: 6280
	:	
Application No.: 10/016,935	:	Group Art Unit: 2143
	:	
Filed: December 14, 2001	:	Examiner: J. Avellino
	:	
For:		SELECTION OF COMMUNICATION STRATEGIES FOR MESSAGE BROKERS OR PUBLISH/SUBSCRIBE COMMUNICATIONS

REPLY BRIEF

Mail Stop Appeal Brief - Patents
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Reply Brief is submitted under 37 C.F.R. § 41.41 in response to the Examiner's Answer dated September 8, 2006.

The Examiner's response to Appellant's arguments submitted in the Appeal Brief of August 11, 2006, raises additional issues and underscores the factual and legal shortcomings in the Examiner's rejections. In response, Appellant relies upon the arguments presented in the Appeal Brief of August 11, 2006, and the arguments set forth below.

On page 2 of the Examiner's Answer, the Examiner asserted that the Summary of Claimed Subject Matter section is deficient. In response, Appellant has included a substitute Summary of Claimed Subject Matter section below:

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claims 1, 11, 14, and 16 are respectively directed to a message brokering system, a data processing system, computer program product, and a method of configuring a message brokering system for efficient inter-broker communications in a multi-broker publish/subscribe environment in which publishers publish messages via message brokers and subscribers register with message brokers to receive published messages.

Referring to independent claims 1 and 14, and Figure 1, a message brokering system for providing a publish/subscribe service for publisher and subscriber application programs includes means 20 for receiving published messages 110. The published messages 110 are received from one or more publisher application programs 10 (page 23, lines 10-16 of Appellant's disclosure). Also included is means 20 for forwarding received messages 110 to connected message brokering systems 20' (page 24, lines 1-5). Means 90 are included for selecting a message filtering policy 80 which is appropriate for a communication characteristic of an inter-broker communication link 70 between the message brokering system and one of the connected message brokering systems (page 25, lines 1-13; page 26, lines 24-28). Means 20 are also included for controlling the forwarding of messages 130 via the inter-broker communication link 70 using the selected message filtering policy 80 (page 26, lines 19-28). The means 90 for selecting a message filter policy 80 is separate from the publisher application programs 10 and the subscriber application programs 30 (Figure 1).

Referring to claim 2, the communication characteristic used to select a message filtering policy 80 is a communication protocol provided by the communication link 70 (page 29, lines 4-16). Referring to claim 3, establishing an inter-broker communication link 70 includes defining the communication characteristic for the link 70 (page 29, lines 7-9); comparing the

communication characteristic with a list of administrator-defined associations between communication characteristics and message filtering policies, to select a message filtering policy 80 for the communication link 70 (page 29, lines 9-14); and storing an identification of the selected message filtering policy 80 in association with the communication link 70 (page 29, lines 14-16).

Referring to independent claim 11 and Figure 1, a data processing system includes at least a first and a second message broker 20, 20', connected via one or more inter-broker communication links 70 and configured to provide a publish/subscribe service for publisher application programs 10 and subscriber application programs 30 (page 24, lines 1-16). The system includes means 90 for selecting a message filtering policy 80 which is appropriate for a communication characteristic of a communication link 70 between the first and second message brokers 20, 20' (page 25, lines 1-13; page 26, lines 24-28). Means 20 are also included for controlling the transmission of messages 130 via the inter-broker communication link 70 using the selected message filtering policy 80 (page 26, lines 19-28). The means 90 for selecting a message filter policy 80 is separate from the publisher application programs 10 and the subscriber application programs 30 (Figure 1).

Referring to independent claim 16 and Figure 1, a method of configuring a message brokering system for efficient inter-broker communications in a multi-broker publish/subscribe environment in which publishers 10 publish messages 110 via message brokers 20, 20' and subscribers 30 register with message brokers 20, 20' to receive published messages 110 is disclosed. Responsive to a communication characteristic for a communication link 70 between the message brokering system 20 and another message brokering system 20', a message filtering policy 80 is selected according to the determined communication characteristic (page 25, lines 1-

13; page 26, lines 24-28). The transmission of messages 130 via the communication link 70 using the selected message filtering policy 80 is controlled (page 26, lines 19-28).

REMARKS

Notwithstanding the other arguments presented below, Appellant submits that based upon just the following arguments, the Board should find sufficient grounds to dismiss the Examiner's prior art rejections of claims 1-14.

On pages 13 and 14 of the Second Amendment, Appellant noted that independent claims 1, 11, and 14 have been amended to distinguish the claimed invention over the applied prior art. Specifically, each of claims 1, 11, and 14 have been amended to recite that "the means for selecting a message filter policy is separate from the publisher and subscriber application programs." However, as noted on page 7 of Appellant's Appeal Brief, the Examiner did not address these arguments in the Third Office Action.

Not only has the Examiner not addressed these arguments, the Examiner has not even alleged, either in the Third Office Action or the Examiner's Answer, that the combination of Owens and Narasimhan teaches or suggests this limitation. Despite Appellant specifically pointing out, on page 7 of the Appeal Brief, the deficiency of the statement of the rejection with regard to this limitation, both the "Grounds of Rejection" and "Response to Argument" portions of the Examiner's Answer continue to ignore that this limitation has been claimed. Therefore,

the Examiner has failed to even allege that the applied prior art teaches or suggests all of the claimed limitations.¹

On page 7 of Appellant's Appeal Brief, Appellant also noted that in the Second Amendment, Appellant argued that the Examiner's proposed modification of Owens by Narasimhan would impermissible change the principle of operation of Owens, but this argument was not addressed by the Examiner in the Third Office Action. Despite the reminder within the Appeal Brief to the Examiner that the Examiner had not addressed a previously presented argument, the Examiner has continued to ignore this outstanding argument in the Examiner's Answer.

Similarly, with regard to claims 2 and 3, on page 8 of the Appeal Brief, Appellant noted that the Examiner had not addressed, within the Third Office Action, outstanding arguments that were previously presented in the Second Amendment. Despite the reminder within the Appeal Brief, the Examiner has continued to ignore these outstanding arguments in the Examiner's Answer.

Therefore, based upon the arguments presented above, Appellant submits the sufficient grounds exists for the Board to overturn the Examiner's rejections of claims 1-14.

On pages 12-14 of the Examiner's Answer, the Examiner addressed four separate arguments presented by Appellant within the Appeal Brief, which the Examiner separately

¹ It is legally erroneous to ignore any claim limitation. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

labeled A1, A2, A3, and A4. With regard to argument A3, the Examiner noted that the Examiner's asserted motivation to combine had been changed, which made this argument moot. Appellant, therefore, will not address the Examiner's comments with regard to A3.

Argument A1

The argument characterized by the Examiner as "A1" is found on page 5 of the Appeal Brief. In summary, Appellant argued that the Examiner "failed to specifically identify within Owens a teaching can be found that supports the Examiner's allegations that Owens discloses selecting a filter appropriate for a communication characteristic" (emphasis in original). The Examiner's response to this argument is found in the first full paragraph on page 13 of the Examiner's Answer.

The Examiner's initial comment with regard to Appellant's argument is that "Appellant has not clearly defined what is meant by 'communication characteristic.'" Despite this argument, the Examiner has not rejected the claims based upon the second paragraph of 35 U.S.C. § 112 as being indefinite. Therefore, Appellant presumes that the Examiner believes the language at issue particularly points out and distinctly claims the subject matter which Appellant regards as the invention.

Notwithstanding this lack of agreement between what the Examiner has argued and how the Examiner has rejected (or not rejected) the claims, to support the Examiner's position, the Examiner has conveniently ignored that the limitation at issue is not just a "communication characteristic" in isolation, but instead, a "communication characteristic of an inter-broker

communications link," which is between a message brokering system and one of a connected message brokering system. Thus, despite the Examiner's assertion to the contrary, Appellant has clearly and distinctly described the communication characteristic as being related to an inter-broker link.

As noted by Appellant in the first full paragraph on page 9 of the Second Amendment, the Examiner has failed to consider the claimed invention, as a whole, by improperly parsing the phrase "communication characteristics" from the phrase "communication characteristics of an inter-broker communications link." By asserting that Owens teaches selecting a message filtering policy based upon a "communication characteristic," the Examiner has improperly characterized the differences between Owens and the claimed invention.

Appellant recognizes that Owens teaches selecting a message filtering policy based upon a characteristic. As such, a proper recognition of the differences between Owens in the claimed invention is that Owens fails to teach that the "characteristic" is a "communication characteristic of an inter-broker communication link."

Appellant also note that the Examiner has relied upon the cited cases of In re Keller and In re Merck to assert that "one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references," which is discussed in M.P.E.P. § 2145(IV), entitled "Arguing Against References Individually." Appellant respectfully submits that reliance upon these cases is inappropriate in the present situation. In the statement of the rejection, the Examiner has relied upon both Owens and Narasimhan, individually, to teach

certain of the claimed limitations. Thus, when the Examiner has relied only on Owens (and not Narasimhan alone or in combination with Owens) to teach or suggest a particular limitation, Appellant's position is that an appropriate argument is to assert that Owens does not teach or suggest the particular limitation for which only Owens is being relied upon to teach. This line of reasoning should also hold true for a situation in which the Examiner relies only upon a secondary reference (e.g., Narasimhan) to teach or suggest a particular claimed limitation.

Argument A2

The argument characterized by the Examiner as "A2" is found on pages 5 and 6 of the Appeal Brief. In summary, Appellant argued that "the Examiner is taking a teaching associated with the notion of rerouting a message if a server has failed and tried to apply this teaching to Owen's teaching of selecting a filtering policy." Appellant further argued that the Examiner "has failed to establish a reasonable basis for why one having ordinary skill in the art would modify Owens in view of Narasimhan in the manner suggested by the Examiner." The Examiner's response to this argument is found in the paragraph spanning pages 13 and 14 of the Examiner's Answer.

Similar to one of the issues raised by the Examiner in response to argument A1, the Examiner asserted that a "message filtering policy" was not "clearly defined." In response, Appellant incorporates herein the arguments previously presented above. Specifically, the Examiner has not rejected the claims based upon the second paragraph of 35 U.S.C. § 112 as being indefinite. Therefore, Appellant presumes that the Examiner believes the language at issue

particularly points out and distinctly claims the subject matter which Appellant regards as the invention.

The apparent purpose for the Examiner asserting that the claimed "message filtering policy" was not clearly defined is to support the Examiner's overly broad claim construction that:

this selection of an alternative destination server and determination of the computer network routing information required for sending the filtered message to the alternate destination can be construed as the claimed "selecting a message filtering policy based on a communication characteristic of a ... link".

Appellant disagrees with the Examiner's rationale for this claim construction. At the outset, the Examiner's assertion is simply a conclusory statement without any factual support as to why one having ordinary skill in the art, based upon the full breadth of the ordinary and customary meaning of the phrase "message filtering policy," would construe this phrase in the manner suggested by the Examiner.

In addition, the Examiner's assertion that the phrase "message filtering policy" is not clearly defined does not recognize that the concept embodied by this phrase is commonly used in the art. For example, in column 5, lines 3-17, Narasimhan describes criteria used for message filtering. This teaching of message filtering by Narasimhan, however, is not comparable to the teachings found in column 7, lines 1-15 of Narasimhan, which describes a technique for backing up certain components of the system by supplying a redundant source server 117, mirror database 119, and alternate destination server 125.

Appellant also notes the assertion made by the Examiner in the above cited passage on page 13 of the Examiner's Answer and the following passage found on page 4 of the Examiner's Answer:

Narasimhan discloses another message brokering system which discloses selecting a policy, based on the communication characteristic of the network (i.e., if server A is down, then go down the list of user defined available servers until an appropriate server is found which can route the message to the user) (col. 4, lines 30-63; col. 5, lines 25-30; col. 7, lines 1-15).

In particular, the Examiner asserted that whether or not a sever is available (or down) corresponds to the claimed "communication character of a ... link." Appellant respectfully disagrees with this assertion. The entire claimed limitation at issue is "a communication characteristic of an inter-broker communication link between the message brokering system and one of said connected message brokering systems." Thus, the Examiner has ignored that the "link" is an "inter-broker communication link" (emphasis added) and that the link is "between the message brokering system and one of said connected message brokering systems." As already argued above, it is improper for the Examiner to ignore a claimed limitation.

Moreover, the Examiner has ignored the ordinary and customary meaning of the term "link." The Examiner is improperly asserting that the servers of Narasimhan correspond to the claimed link. A network is comprised of nodes, which are connected by links. Whereas Narasimhan includes teachings with regard to a characteristic of the nodes (i.e., the servers) of the network, the claimed invention regards communication characteristics of the communication links, which are different than the nodes (i.e., a message broker system and one of the connected message brokering systems).

Notwithstanding the issues described above, Appellant notes that within the "Response to Argument" portion of the Examiner's Answer, the Examiner did not address Appellant's original argument, which is that the Examiner has failed to establish a realistic reason why one having ordinary skill in the art would modify Owens in view of Narasimhan in the manner suggested by the Examiner. Appellant recognizes that in the paragraph spanning pages 4 and 5 of the Examiner's Answer, the Examiner set forth a new motivation to modify Owens in view of Narasimhan. However, as will be discussed below in reference to Argument A4, even if one having ordinary skill in the art were motivated to modify Owens in view of Narasimhan, the claimed invention would not result.

Argument A4

The argument characterized by the Examiner as "A4" is found on page 7 of the Appeal Brief. In summary, Appellant referred to pages 11-13 of the Second Amendment, and argued that even if one having ordinary skill in the art were motivated to modify the references, the claimed invention would not result. Appellant also noted that the Examiner's response to Appellant's initial argument in Second Amendment did not directly address Appellant's arguments. The Examiner's response to this argument is found in the second full paragraph on page 14 of the Examiner's Answer.

Similar to the Examiner's initial response to this argument, which is found in the paragraph spanning pages 14 and 15 of the Third Office Action, the Examiner's response in the Examiner's Answer does not directly address Appellant's argument. Instead, the Examiner, without any substantive analysis, disagrees with Appellant's argument.

To modify Owens in view of Narasimhan to include the redundant "source server 117, mirror database 119, and alternate destination server 125" (column 7, lines 1-2 of Narasimhan) would not modify how a message filtering policy is selected by Owens since the redundant features taught by Narasimhan are unrelated to message filtering.

For the reasons set forth in the Appeal Brief of August 11, 2006, and for those set forth herein, Appellant respectfully solicits the Honorable Board to reverse the Examiner's rejections under 35 U.S.C. § 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: October 10, 2006

Respectfully submitted,

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CUSTOMER NUMBER 46320